## ABSTRACT OF THE DISCLOSURE

In a the method for determining distortions in an image that can be generated with an imaging system from a subject arranged in an imaging volume of the imaging system, a first region of the imaging volume is presented undistorted in the image and a second region of the imaging volume is presented distorted in the image. Using the imaging system, an image of at least three markings that have a known spatial position relative to one another is produced. A first and a second of the three markings are arranged in the first region and a third of the three markings is arranged in the second region. The position of the imaged markings in the image is determined. An ideal position of the third marking in the image is determined from its known spatial arrangement with respect to the first and second markings. A positional difference of the imaged third marking from its ideal position is identified. The positional difference represents a criterion for the distortion.